CLAIMS:

1. A glass ceramic sintered body containing gahnite and cordierite as crystal phases, having a thermal expansion coefficient at 40 to 400°C of not larger than 5 x 10^{-6}/°C, a dielectric constant of not larger than 7 and a Young's modulus of not larger than 150 GPa.

2. A glass ceramic sintered body according to claim 1, wherein the flexural strength is not smaller than 150 MPa.

3. A glass ceramic sintered body according to claim 1, wherein the content of PbO and the content of an alkali metal oxide are not larger than 0.1 mass%, respectively.

4. A glass ceramic sintered body according to claim 1, further containing at least one of those selected from the group consisting of alumina, spinel, mullite, anorthite, slawsonite, celsian and zirconir, as a crystal phase.

5. A glass ceramic sintered body according to claim 1, obtained by firing a mixed powder of a glass powder having the following composition:

SiO_2: 30 to 55 mass%
Al_2O_3: 15 to 40 mass%
MgO: 3 to 25 mass%
ZnO: 2 to 15 mass%
B_2O_3: 2 to 15 mass%

and a filler powder.

6. A glass ceramic sintered body according to claim 5, containing a cordierite crystal phase in an amount of not smaller than 20 mass% and having a thermal expansion coefficient at 40 to 400°C of not larger than 4.5 x 10^{-6}/°C.

7. A glass ceramic sintered body according to

claim 6, by using, as said filler powder, at least one inorganic powder for adjusting properties selected from the group consisting of mullite, anorthite, slawsonite, celsian and quartz glass, and further using a cordierite powder.

8. A glass ceramic sintered body according to claim 5, having a CaO-containing glass phase.

9. A glass ceramic sintered body according to claim 8, further containing alumina as a crystal phase.

10. A glass ceramic sintered body according to claim 9, wherein the flexural strength is not smaller than 200 MPa, and a reduction in the weight of when immersed in a 1-mass% HF aqueous solution for one minute is not larger than 3 $\mu g/mm^2$.

11. A glass ceramic sintered body according to claim 10, wherein a CaO-releasing Ca compound powder, a cordierite powder and an alumina powder are used as said filler powders.

12. A glass ceramic sintered body according to claim 5 wherein the cordierite, enstatite and/or forsterite are contained as crystal phases, the content of the cordierite is not smaller than 20 mass%, and the total content of the cordierite, enstatite and/or forsterite is not smaller than 40 mass%.

13. A glass ceramic sintered body according to claim 12, wherein the flexural strength is not smaller than 200 MPa, and the cordierite powder, enstatite powder and/or forsterite powder are used as said filler powders.

14. A method of producing a glass ceramic sintered body by mixing a glass powder having the following composition:

SiO_2: 30 to 55 mass%

Al_2O_3: 15 to 40 mass%
MgO: 3 to 25 mass%
ZnO: 2 to 15 mass%
B_2O_3: 2 to 15 mass%

and a filler powder together to prepare a mixed powder containing not less than 59.5 mass% of the glass powder, forming an article by molding the mixed powder, and firing the article in the atmosphere or in a nitrogen atmosphere at a temperature of not higher than 1050°C.

15. A method of producing a glass ceramic sintered body according to claim 14, using, as said filler powder, at least one inorganic powder for adjusting properties selected from the group consisting of mullite, anorthite, slawsonite, celsian and quartz glass, and using a mixed powder which contains said powder for adjusting basic properties in an amount of 1 to 40 mass%.

16. A method of producing a glass ceramic sintered body according to claim 15, further using a cordierite powder as said filler powder, and using a mixed powder which contains said powder for adjusting basic properties in an amount of 1 to 40 mass% and said cordierite powder in an amount of 0.5 to 20 mass%.

17. A method of producing a glass ceramic sintered body according to claim 14, using a CaO-releasing Ca compound powder as said filler powder.

18. A method of producing a glass ceramic sintered body according to claim 17, wherein said CaO-releasing Ca compound is at least one oxide selected from the group consisting of $CaSiO_3$, $CaZrO_3$, Ca_2SiO_4, $CaAl_2O_4$, $CaAl_4O_7$ and $CaAl_2SiO_6$.

19. A method of producing a glass ceramic sintered body according to claim 17, wherein said CaO-

releasing Ca compound is used in amount of 0.01 mass times being calculated as CaO per B_2O_3 in said glass powder.

20. A method of producing a glass ceramic sintered body according to claim 17, further using a cordierite powder and an alumina powder as said filler powders, and using a mixed powder which contains said cordierite powder in an amount of 0.5 to 20 mass% and said alumina powder in an amount of 5 to 35 mass%.

21. A method of producing a glass ceramic sintered body according to claim 20, further using at least one kind of a powder for adjusting basic properties selected from the group consisting of mullite, anorthite, slawsonite, celsian and quartz glass as said filler powder, and using a mixed powder which contains said powder for adjusting basic properties in an amount of not larger than 20 mass%.

22. A method of producing a glass ceramic sintered body according to claim 14, further using a cordierite powder and an enstatite powder and/or a forsterite powder as said filler powders, and using a mixed powder which contains said cordierite powder in an amount of 0.5 to 20 mass% and said enstatite powder and/or said forsterite powder in an amount of 5 to 40 mass%.

23. A method of producing a glass ceramic sintered body according to claim 22, further using at least one kind of a powder for adjusting basic properties selected from the group consisting of mullite, anorthite, slawsonite, celsian and quartz glass as said filler powder, and using a mixed powder which contains said powder for adjusting basic properties in an amount of not larger than 20 mass%.

24. A wiring board having wiring layers of a low-resistance metal arranged on the front surface

and/or inside of an insulating substrate made of a glass ceramic sintered body of claim 1.

25. A wiring board according to claim 24, wherein a semiconductor device comprising chiefly silicon is arranged on the surface of said insulating substrate.

26. A wiring board according to claim 25, wherein a recessed portion is formed in the surface of said insulating substrate, and a semiconductor device comprising chiefly silicon is arranged in said recessed portion.

27. A mounted structure of a wiring board obtained by mounting a wiring board of claim 24 on the surface of a printed wiring board that has an insulating substrate containing an organic resin.